

Title (en)

MICROELECTROMECHANICAL TRANSDUCER WITH THIN-MEMBRANE FOR HIGH PRESSURES, METHOD OF MANUFACTURING THE SAME AND SYSTEM INCLUDING THE MICROELECTROMECHANICAL TRANSDUCER

Title (de)

MIKROELEKTROMECHANISCHER WANDLER MIT DÜNNMEMBRAN FÜR HOHE DRÜCKE, VERFAHREN ZUR HERSTELLUNG DAVON UND SYSTEM MIT DEM MIKROELEKTROMECHANISCHEN WANDLER

Title (fr)

TRANSDUCTEUR MICROÉLECTROMÉCANIQUE AVEC FINE MEMBRANE POUR PRESSIONS ÉLEVÉES, SON PROCÉDÉ DE FABRICATION ET SYSTÈME COMPRENANT LE TRANSDUCTEUR MICROÉLECTROMÉCANIQUE

Publication

EP 3450949 B1 20201014 (EN)

Application

EP 18188756 A 20180813

Priority

IT 201700096658 A 20170828

Abstract (en)

[origin: EP3450949A1] Microelectromechanical transducer (1; 11) comprising a semiconductor body (2), four cavities (4a-4d) buried within the semiconductor body (2) and four membranes (5a-5d), each membrane (5a-5d) being suspended over a respective cavity (4a-4d) and being capable of being deflected by the action of a pressure external to the microelectromechanical transducer (1; 11); the microelectromechanical transducer (1; 11) further comprising four transducer elements (6a-6d; 16a-16d) housed by a respective membrane (5a-5d) and electrically coupled to one another in a Wheatstone bridge configuration to convert said external pressure into an electrical signal.

IPC 8 full level

G01L 9/00 (2006.01)

CPC (source: CN EP US)

G01L 9/0045 (2013.01 - EP US); **G01L 9/0052** (2013.01 - EP US); **G01L 9/0054** (2013.01 - CN US); **G01L 13/025** (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3450949 A1 20190306; EP 3450949 B1 20201014; CN 109425460 A 20190305; CN 109425460 B 20210518; CN 208736597 U 20190412; IT 201700096658 A1 20190228; US 10527511 B2 20200107; US 2019064020 A1 20190228

DOCDB simple family (application)

EP 18188756 A 20180813; CN 201810983712 A 20180827; CN 201821387111 U 20180827; IT 201700096658 A 20170828; US 201816101987 A 20180813